QTXCF 8.4.2.1
9/1/2007

BNSF RAILWAY

System Emergency Response Plan

In the event of a hazardous materials emergency, **do the following immediately**:

1. Take all precautions necessary to protect yourself and your coworkers
2. Check the wind direction
3. Isolate and secure the immediate area and directly down wind
   - Ensure that BNSF employees, contactors and the public do not enter the effected area
4. Obtain as much as information on the situation as possible, including
   - Car Numbers
   - Commodities
   - Injuries
   - Amount spilled
   - Distance to homes and business
   - Water (Lakes, Rivers, Streams) effected
5. If spill may effect or may impacted the general public, call 911
6. Contact either the BNSF Service Interruption Desk (817-234-2350/817-234-6164) or BNSF Resource Operations Center (800-832-5452).
7. Review specific job responsibilities within the System Emergency Response Plan on the following pages:

SYSTEM HAZARDOUS MATERIALS EMERGENCY RESPONSE PLAN

"By failing to prepare, you are preparing to fail."

— Benjamin Franklin —

Established: January 1998

Revised: September 2007

SYSTEM

HAZARDOUS MATERIALS

EMERGENCY RESPONSE PLAN

Updated plans are available via the BNSF Intranet at:

http://bnsfweb.bnsf.com/departments/envhaz/serp_contents.htm

If you have any questions regarding this plan, please contact Pat Brady, Asst. Director Hazardous Materials at (817) 740-7358.

Established: January 1998

Revised: September 2007

TABLE OF CONTENTS

PURPOSE

The purpose of the *Hazardous Materials Emergency Response Plan* is to provide and document the framework for BNSF to follow in the event of a hazardous material incident. For purposes of this plan, an incident means a release or potential release of a material that may adversely affect human life, health, or the environment. The plan includes procedures for prompt notification of responders, shippers, and the public, as necessary, along with a description of their roles in response, post-incident critique, and follow-up. To ensure an effective response, it is extremely important that all involved personnel understand their assigned roles, that sound decisions are made, and that action is initiated in a timely manner so that an effective response can be carried out.

BNSF recognizes its shippers' concerns and its own responsibility to have an effective contingency plan. The plan must ensure reasonable response to minimize and control health, environmental, and liability risks. Railroads in the United States have primary responsibility for controlling incidents involving their operations, equipment, and property. BNSF recognizes and embraces this responsibility. With regard to hazardous material incidents, BNSF will utilize all available resources, including the knowledge and experience of our shippers, to safely mitigate an incident. In the event of an incident, the handling of the event will be preformed with priority given to the protection of life, health and the environment, in that order.

Local Preparedness Plans (LPPs) have been developed for major BNSF yards, terminal, and intermodal facilities. These plans provide the following:

- Local emergency notification procedures
- Evacuation procedures
- "Safe haven" locations for leaking hazmat packages
- Available internal and external resource listings

LPPs can be found at primary yard, terminal and/or intermodal facility offices. It is the responsibility of the BNSF Division Superintendent to maintain the LPPs.

For an example of the LPP, see Local Preparedness Plans.

Local Reaction Plans (LERP) have been developed, and are a part of the System Emergency Response Plans SERP, for locations that have a specific unique hazard that can endanger BNSF employees or the environment and may not be covered by the Local Preparedness Plans. BNSF LERPs are:

- Pueblo Chemical Agent Storage and Disposal Facility - Pueblo, CO
- Umatilla Chemical Agent Storage and Disposal Facility – Umatilla, WA
- Alkali Creek Diesel Storage Tank – 6 miles north of Billings, MT

- Deschutes River GRP – Oregon Trunk Subdivision

NOTIFICATION PROCEDURES

Notification procedures are initiated immediately following the report of an incident potentially involving hazardous materials. An incident is considered an emergency until complete information from the scene indicates that the situation is stabilized. It is essential that proper notification be promptly initiated to ensure timely response.

DISPATCHER, TRAINMASTER, OR YARDMASTER

A dispatcher, trainmaster, or yardmaster will generally receive the first report of an incident. This report will usually come from a train crew or switch crew. If a train crew or switch crew member is incapacitated, or the incident does not involve a train or switching movement (such as a car leaking on at a siding), the initial report may come from a local emergency response agency. The Resource Operations Center (800-832-5452) or other BNSF channels (see Civil Agency Hazmat Notification) would likely receive such calls. The dispatcher, trainmaster, yardmaster, or Resource Operations Center (ROC) will obtain as much information as possible, such as:

- Exact location of the incident
- Initials and numbers of cars that may be involved
- Commodities or materials involved
- Severity of the incident, specifically situations that may pose immediate danger to life, health, or the environment
- Circumstances of the incident
- Weather conditions, including wind direction, at the incident site
- Distance to the nearest populated areas
- Possible impact to waterways
- Where the train or switch crew can be located and how they can be identified
- Any emergency response activities already initiated and by whom

SERVICE INTERRUPTION DESK (SID)

After the dispatcher, trainmaster, or yardmaster receives a report of an incident, notification will be made to the BNSF Network Operations Center's (NOC) Service Interruption Desk in Fort Worth **(North Operations at 1-817-234-6164 or South Operations at 1-817-234-2350)**. The SID can also be notified through the ROC at 1-800-832-5452 or 1-817-234-7200.

The ROC and SID will immediately initiate their respective notifications in accordance with the applicable portion of the Critical Incident Notification procedures. (See Critical Incident Notification procedures.)

After the SID or the ROC receives notification of an incident, they will first ensure that the other is notified of the event. The SID will then notify the following organizations:

- **Hazardous Materials and Environmental Responders (HMRs)** — The SID immediately notifies a sufficient number of the nearest BNSF HMRs.
- **BNSF Departments** — The SID will notify and communicate support with the following BNSF departments:
  - Operating
  - Mechanical
  - Engineering
  - Environmental
  - Safety
  - Medical
  - Corporate Relations
  - Marketing
- **US, Canadian, State, Provincial, and/or Industry Agencies** — As soon as possible, the SID will notify US, Canadian, State, Provincial, and/or Industry as outlined in the BNSF's Government Notification Procedure for Environmental and Hazardous Materials Releases. These may include:
  - National Response Center (NRC) for NTSB, FRA, USCG, and USEPA notifications
  - Transport Canada
  - State or Provincial agencies, including the environmental agencies, offices of emergency services, public utilities commissions, and railroad commissions
  - Center for Disease Control (CDC)
  - Nuclear Regulatory Commission (NRC)
  - Association of American Railroads (AAR) Bureau of Explosives

The SID will provide agencies with supplemental reports as changes in the incident are known during the emergency phases. Otherwise, HMRs will provide follow-up reports detailing incident circumstances.

- **Shippers and Customers** — As soon as reasonably possible, the SID will notify shippers whose shipments may be involved in the incident. The telephone number for this notification will be the number provided on the shipping paper, bill of lading, or waybill. If no emergency response telephone number is available, the SID will notify CHEMTREC and request notification of the customer. The BNSF customer account representative or BNSF's Manager of Responsible Care will provide follow-up information to customers.

RESOURCE OPERATIONS CENTER (ROC)

As soon as the ROC receives notification of an incident, but after the SID and the ROC ensure the other is notified, the ROC will notify the following:

- **Civil Emergency Responders** — The ROC will notify appropriate civil emergency responders if they have not been already notified.
- **BNSF Departments** — The ROC will notify and provide communication liaison between the scene and following BNSF departments:
  - Corporate, regional, and local claims representatives
  - Special agents (for site security)
  - Freight claims
  - Load and Ride Solutions (LARS)

HAZARDOUS MATERIAL AND ENVIRONMENTAL RESPONDERS (HMRs)

BNSF HMRs will contact either directly, or through the SID, the following groups and also provide follow-up information:

- Hazardous materials response contractors
- State and federal regulatory agencies
- Shippers

Because the SID telephone conversations are tape recorded, it is always optimal for the SID to provide updated information to regulatory agencies.

PUBLIC RELATIONS

BNSF Corporate Relations will provide press releases for the news media. They will consult with shippers regarding specific product information for their press releases. When circumstances warrant, BNSF Corporate Relations will coordinate with the civil responders' Public Information Officer to provide a joint press release. For current telephone numbers, (See BNSF Corporate Relations.)

HAZARD IDENTIFICATION

The most critical aspect of response to a hazardous materials incident is the initial assessment of the situation. This assessment must be based on a thorough understanding of the hazards and potential hazards involved in the situation. Every incident involving a hazardous material is considered an emergency until there is reasonable certainty that no hazardous materials has been released.

Typically, a train or switch crew will initiate an incident response by notifying a dispatcher, trainmaster, or yardmaster. The train crew can quickly determine if an incident may involve hazardous materials by reviewing the train list or other shipping papers. Hazardous materials shipping papers identify hazards associated with the materials along with response information that indicates proper handling and personnel protective measures. If the train or switch crew, for whatever reason, is unable to provide the needed information, the dispatcher, trainmaster, or yardmaster has access to the train list and emergency response information via the Transportation Service System (TSS).

Upon arrival at the site, the HMR will conduct a situation and safety briefing with the crews, trainmaster, yardmaster or dispatcher. The briefing will consist of car(s) and product(s) involved, nature of the release, evacuations, reported injuries and response objectives. The HMR will provide instructions to the crews, trainmaster, yardmaster, or dispatcher on isolation zones and train/yard activities.

The HMR will make a thorough evaluation of the hazards and potential impact on life, health, and the environment. The HMR's evaluation will include:

Weather

- Current wind direction and speed
- 24-hour forecast

Chemical Hazards

- Organic vapors, gases, and particulates
- Inorganic vapors, gases, and particulates
- Oxygen deficiency
- Specific characteristics of the chemicals involved
- Combustible vapors or gases
- Radiation

Physical Condition of Materials Involved

- Solids, liquids, and gases
- Color
- Behavior (foaming, vaporizing, corroding)

Potential Pathways of Dispersion

- Air
- Surface water
- Ground water
- Land surface
- Ditches, wells, streams, and ponds

Site configuration

- Accessibility
- Characteristics (conducive to product containment or recovery)
- Post-emergency remediation factors (short term and long term)

The identification of hazards will vary in complexity depending on the characteristics of the involved materials, incident site, and the severity of the incident.

INCIDENT LEVEL CLASSIFICATION

An understanding of the distinction between an incidental release of a hazardous material and a release that requires an emergency response is fundamental to proper compliance with the provisions of OSHA's HAZWOPER regulations (29 CFR 1910.120 (q)).

Potential releases of hazardous materials that may occur along a BNSF owned track or yard can be categorized into three distinct groups, which include:

1. Releases that are clearly incidental regardless of the circumstances
2. Releases that may be incidental or may require an emergency response depending on the circumstances; and
3. Releases that clearly require an emergency response regardless of the circumstances

Therefore, a system to classify incidents based on its severity and availability of resources is an effective tool in managing an actual or potential threat to human health or the environment. Incident level classification will help the first-arriving personnel initiate appropriate actions.

The criteria used to identify the severity of the incident are:

- Extent of injuries and/or deaths
- Extent or need of evacuation
- Extent of need for hazardous materials or environmental response specialists
- Level of technical expertise needed to abate the incident
- Extent of governmental involvement

The first-arriving personnel will evaluate these factors to determine classification of the incident. The incident will then be assigned one of three categories based on severity.

LEVEL I INCIDENT

In Level I Incidents:

- No evacuation is required
- First responders can contain and control the release without specialist support
- BNSF HMRs or contractor first-response personnel can effectively manage and mitigate the release

This is an incidental release of a hazardous material which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee mitigating the release.

It does not have the potential to become an emergency within a short time frame. Level I incidents are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to employees in the immediate work area and those assigned to mitigate the release.

An example of a Level I incident, might be a leak that can be stopped by tightening a valve. In this case the shipper will be given non-emergency notification.

The OSHA HAZWOPER Standard does not require emergency response to incidental releases. An incidental release poses an insignificant threat to health or safety and may be safely mitigated by BNSF employees in the area who are familiar with the hazards of the chemical with which they are working, as allowed under OSHA Standards.

Level II Incident

In Level II Incidents:

- The release or potential release can be effectively contained with specialized equipment and supplies employed by a HMR team.
- Evacuation is needed only in the immediate area of an actual or potential release.
- Governmental agencies have responded with technical specialists.

Level II Incidents require BNSF HMR personnel and additional technical assistance from a BNSF strike team, environmental response contractor, industrial specialist, or government agency strike team.

A representative Level II Incident is a tank car that is involved in a derailment with a large quantity of its lading released on the ground or in a waterway. Appropriate BNSF personnel would be mobilized immediately. HMR contractors, environmental response contractors, and shippers would be notified immediately as determined by the first-arriving personnel.

Level III Incident

In Level III Incidents:

- Releases cannot be properly abated with immediately accessible HMRs and equipment
- Sustained evacuation of the surrounding area is required
- Multiple governmental agencies are involved

Level III Incidents pose major threats to life, health, or the environment. A representative Level III Incident could be a derailment involving multiple, incompatible chemical products. Such an incident would constitute a major event and all appropriate departments, emergency response contractors, and shippers would be immediately notified for mobilization.

INCIDENT MANAGEMENT

Depending on the level of an incident, the responsibilities and actions taken by various departments will vary. Because every detail of an emergency situation cannot be identified in advance, this section provides guidance and procedures to follow when managing emergencies.

An Incident Command System (ICS) established on the National Incident Management System (NIMS) is necessary to effectively control an emergency situation. The typical steps and transactions of control are likely to flow as follows:

1. A train or switch crew notifies the dispatcher, trainmaster, or yardmaster of an incident.

2. The highest-ranking BNSF officer at the site will assume the lead emergency management role and become the BNSF Incident Director (ID). This company officer will responsible for all railroad activities at the incident and will work directly with civil authority's Incident Commander (IC).

3. Local, state and federal regulations require that the civil IC be the individual in charge of the incident. However, it is BNSF's preference (because of our specific knowledge, experience and training) to have control over the hazardous materials operations.

4. Regardless of who is managing the emergency, the objectives to ensure public safety and mitigate environmental damage are of primary concern. The first priority is human life and health.

5. The HMR should use the shipping documents to identify and verify the commodities involved. Information obtained from the shipping documents and other information will provide an outline of chemical hazards involved. Guidelines for proper emergency handling of the product also accompany the shipping documents. If the train list or shipping papers are destroyed, additional copies are available through the Transportation Service System (TSS) (See TSS HAZMAT Commands) or through the BNSF Customer Service Center at 1-800-786-2873.

6. The IC, BNSF ID, or the person who assumed the emergency management responsibilities should brief the HMR on the situation.

7. The HMR will conduct a situation and safety briefing with the crews, trainmaster, yardmaster, or dispatcher. The briefing will consist of the car(s) and product(s) involved nature of the release, evacuations, reported injuries, and response objectives.

8. The HMR will provide instructions to the crews, trainmaster, yardmaster, dispatcher and BNSF Incident Director on isolation zones and train/yard activities.

9. Because of their experience and specialized training, the HMR will evaluate the stability of the incident. In many Level II and III Incidents, release of product has occurred and timely action is essential to minimize damage. The HMR will have authority to use available resources to initiate an appropriate response.

CONTROL ZONES

After the hazards are identified and the initial plan developed, the next action is to establish control zones:

- **Exclusion Zone** is the area that represents danger to life or health and should be entered only with extreme caution. Depending on the material involved, special protective clothing and equipment is required to enter this zone. Appropriate reference resources should be used to determine safe distances for this zone.

- **Contamination Reduction Zone** provides the forward-access point for exclusion zone support personnel. Decontamination stations are located in this zone.

- **Support Zone** is a safe area where the Incident Commander and other functions that do not have a need to be closer to the incident are located.

- **Evacuation Zone**. When needed, BNSF will deploy third-party professionals to conduct air, soil, and water monitoring to determine and document the extent of contamination. This monitoring may be used to increase or decrease evacuation zones.

SITE SECURITY

Areas around the danger area need to be controlled during emergencies by prohibiting unauthorized personnel from entering pre-established control zones. Emergency responses are coordinated from a command post a safe distance away from the exclusion zone. BNSF's Police and special agents will have responsibility for site security and control and are responsible for taking all actions and decisions required under the circumstance to safe lives, prevent injuries, provide safety to the general public and BNSF personnel, and to protect property within the BNSF right-of-way. However, in many cases the local law enforcement agency may be the first to arrive on-scene and will have begun site security and management operations prior to the arrival of BNSF Police. In these cases, the highest-ranking special agent has the responsibility to coordinate site security with the local law enforcement agencies. These entities will work together to ensure that the site is secured and will not allow unauthorized personnel or the public to enter the area.

Contracted security services should be considered if BNSF and the civil agencies can not provide enough resources for proper security.

ESTABLISH COMMUNICATION LINKS

As soon as possible the HMR should establish a communication link with the SID. The SID will be a vital asset in determining availability of resources. If practical, the HMR should designate someone to keep a log of all actions and decisions, request resources, and maintain communications with the SID.

Communications capabilities may be limited due to the remote location of the incident site. Even so, every effort should be made to maintain communications with the SID and provide

current information concerning the incident. When necessary, the SID will serve as a communication link between the incident site and other functions, including shippers.

SAFETY AND OPERATIONAL STATUS BRIEFINGS

At periods predetermined by the Incident Commander (IC), BNSF Incident Director (ID) and the HMRs, safety and operational status briefings will be conducted to determine the status of the incident, operations to be conducted over the next operational period, and all safety related issues. These briefings must be documented with the time and date of the meeting, those who attended, and topics of the briefing.

Upon completion of the IC's safety and operational status briefing, a designated HMR or the BNSF ID will brief BNSF employees and BNSF contractors at the site.

Other departments may have activities taking place outside the Exclusion Zone and Contamination Reduction Zone. These departments should be aware of ongoing emergency activities. When shifts change and new personnel are brought to the site, they should also be made aware of ongoing activities. The HMR should be given appropriate relief, dependent upon the availability of qualified personnel, and the relieving HMR should be briefed concerning the situation and intended plan prior to assuming responsibility.

CONTRACT RESPONDERS

As stated previously, local, state, and federal regulations require that the civil IC be the individual in charge of the incident. However, as it is BNSF's preference to have control over the hazardous materials operations, all private response contractors hired by BNSF will work directly for BNSF. All tasks authorized or mandated by the IC must have the concurrence of the BNSF ID or HMR.

DECIDE Process

HMR will use the DECIDE process when managing and mitigating a hazardous material incident. The DECIDE process follows these steps:

D Determine if there is a hazard by placards, shape of container, location, and by shipping paper or train list

E Estimate harm without intervention

C Choose response objectives

I Identify action options

D Do the best option

E Evaluate progress — Have options achieved desired results?

Response

The HMRs will respond to the incident as outlined below.

Assessment

HMRs will conduct an assessment of the site to determine products involved and whether there are any containers leaking. If the containers are leaking an assessment needs to be made whether the leaks can be stopped, slowed, or contained. Additionally, damage assessment must be conducted on all tank cars involved in the incident, especially tank cars transporting compressed gases that have sustained extensive damage without releasing their contents. However, tank car damage can lead to a delayed release of its contents. In one case the release was delayed as long as 40 hour after the derailment.

HMRs should follow AAR's Tank Car Damage Assessment Guidelines (See Tank Car Damage Assessment).

Intervention Alternatives

Utilizing the DECIDE process, the HMRs will determine the intervention alternatives.

Evaluations

The HMRs will evaluate all of the intervention alternatives to look for the alternatives that provide the greatest efficiencies with the least risk.

Intervention Selection

The HMRs will select the best intervention plan.

Concurrence by Incident Commander

Upon selection of the best possible intervention plan, the IC will be briefed. It is imperative that the IC is provided with the intervention alternatives and the criteria for the selected procedure.

The HMRs and BNSF ID will ask the IC for concurrence with the plan.

Implementation

Upon getting IC concurrence, the intervention plan will be initiated. During all phases of the implementation the HMRs must assess their progress and reevaluate whether they choose the best option. If they have not, another intervention plan must be selected.

Mitigating the Release

Management of a hazardous material incident or environmental emergency should make every effort to mitigate the release of material, provided such actions can be taken without unnecessary risk to human life or health. Once the source of release is controlled, the next response should be to determine the extent of contamination while taking steps to mitigate further environmental damage.

ENVIRONMENTAL

The Superfund Amendments and Reauthorization Act (SARA, or more commonly "Superfund") is the controlling federal law that applies to an environmental release or significant threat of a release, as defined by the Act. Most states have a structure to manage their own Superfund programs. The purpose of Superfund is to establish a mechanism of response for the immediate cleanup of contamination from accidental spills and chemical releases. There are three types of responses under Superfund:

- Removals - such as the removal of impacted soil
- Remedial actions – utilizing designed technology such as pump and treatment
- Enforcement actions – penalties and fines assessed for noncompliance or non-action

It is important to note that Title I of SARA ensures citizen involvement in all remedial and removal actions that last longer than 45 days; consequently, cleanup becomes a negotiated position with the regulatory agency that has jurisdiction. Therefore, the company must use every effort during an event to identify, document, and record all data relevant to the event. This information can be used to negotiate subsequent clean up criteria.

The information to establish a company position will usually come by understanding short-term and long-term effects to the environment. An understanding of the vertical and horizontal extent of contamination is needed along with a risk assessment and a feasibility study that includes cost estimates. These reports, however, can take many days, if not weeks, to develop.

Once the imminent danger to human health is understood and action is under way to mitigate further damage, the preferred resources become more readily available with time. As a result, the immediate emergency may have come and gone by the time the final clean up is completed for major liquid spills or gaseous releases.

RESOURCE UTILIZATION

Utilizing resources effectively can minimize exposure. Conversely, improper utilization of resources can be very costly.

The HMR, working with the BNSF Incident Director (ID), has the authority to direct company resources and BNSF contractors to provide reasonable assistance to abate the emergency. As resources become available, the HMR will oversee the deployment of those resources to ensure the objectives of the plan are met. This includes BNSF departments such as operations, safety, environmental, freight claims, Load and Ride Solutions (LARS), in addition to response contractors.

BNSF has primary responsibility for managing incidents involving its operations. The HMRs have training and experience to know their own capabilities and the capabilities of BNSF contractors and governmental agencies. The HMRs will have authority to marshal whatever resources are needed to mitigate the incident. BNSF will exercise prudence in utilizing every available resource to mitigate an incident involving hazardous materials and assure that this is carried out in a safe and environmentally sound manner.

If the HMR's or the Incident Director's limit of authority is exceeded, a request will be made to increase that limit or to dispatch an officer or HMR with a higher authority limit.

BNSF has established master service agreements with emergency response and environmental contractors who are capable of providing assistance at the incident site. Additionally, there are resources available from government agencies and associations that are useful in managing an emergency. BNSF will also involve shippers as primary contacts when seeking technical information about a product.

BNSF HAZARDOUS MATERIAL EMERGENCY RESPONSE TEAM (HMERT)

Trained HMERT members located throughout the BNSF system provide timely response to emergency situations. The HMERT program is comprised of employees from various department including:

- Safety & Rules
- Medical
- Environmental & Hazmat
- Operating
- Mechanical
- Load and Ride Solutions (LARS)
- Engineering

Each member of the HMERT has completed 80 hours of initial training and 32 hours of yearly refresher training and can meet the requirements necessary to assume the responsibility accorded to a HMR. All HMRs are capable of Level A site entry. Equipment for a Level A entry includes self-contained breathing apparatus, appropriate encapsulating suits, plus hand and foot protection. HMRs also have access to combustible gas meters, oxygen meters, photo-ionization devices, colorimetric tubes, assorted tools, plugging compounds, and safety equipment. Some team members are equipped for venting hazardous commodities, such as liquefied petroleum gas, and for applying chlorine "C" kits.

HAZARDOUS MATERIALS RESPONSE "STRIKE TEAM"

The HMERT program is augmented with BNSF technical specialists who comprise a Hazardous Materials Response "Strike Team." The Strike Team, when needed, will converge at the site of the hazardous materials incident and provide technical assistance to the local BNSF HMR. See the following resources:

- BNSF Hazardous Materials Responder Notification List
- BNSF Hazardous Material Policy
- BNSF HMR Equipment List

BNSF HEAVY EQUIPMENT AND SPECIALIZED EQUIPMENT

BNSF work crews have access to specialized equipment and to operators capable of moving supplies into incident sites. Remote areas may require specialized rail-mounted equipment to bring supplies or personnel to the site. BNSF has response equipment such as cranes, material trucks, loaders, backhoes, and dump trucks. This equipment is available to build containment areas and transport supplies.

BNSF work crews who are skilled in operation of the equipment listed above may not be "40-hour" OSHA trained but can work at the site as permitted by Section 1910.120(q) of 29 CFR. However, they must not be expected to function as HMR and must be given a safety briefing at the site prior to their participation in any emergency response. The initial briefing shall include the instruction in the wearing of appropriate personal protective equipment, what chemicals are involved and what duties are to be preformed

BNSF GEOGRAPHIC INFORMATION SYSTEM (GIS)

BNSF has developed a GIS that provides point-and-click information about specific locations on the BNSF rail network. The GIS is especially important in a situation that may impact the health and safety of local communities as it provides rapid access to information about the rail infrastructure, chemical spill handling procedures, environmental risks, and demographic factors. This knowledge enables BNSF to quickly and effectively work with local emergency response agencies.

The GIS includes BNSF track locations and infrastructure data as well as environmental and community demographics within several miles of the right-of-way. Several databases are integrated into the GIS, including:

- CHEMTOX database with information on 10,500 hazardous materials and spill response procedures
- SAFER air dispersion model
- Database of local emergency contacts

GIS also includes a database of street network data, including street names, which allows BNSF staff to locate problems reported by private citizens and local agencies.

ENVIRONMENTAL AND HAZARDOUS MATERIAL CONTRACTORS

Rapid Response Environmental Monitoring Contractors

Rapid response environmental monitoring contractors are available under master service agreements that provide rapid deployment of skilled personnel. These contractors are trained and equipped to respond to emergency situations when there has been a significant release or potential release of hazardous materials that may threaten human life, health, or the environment. These contractors will monitor personnel health and natural resources with specialized equipment operated by highly trained personnel.

Hazardous Materials Contractors

BNSF has agreements in place to use hazardous materials contractors who have regional or nation-wide response capabilities. The contractors' personnel are qualified and equipped for Level A site entry and typically have vacuum trucks, transfer equipment, booms, boats, specialized transfer equipment and tools, decontamination equipment, mobile treatment systems, and other equipment needed for hazardous materials response. BNSF has selected recognized leaders in emergency response that can provide adequate resources of qualified personnel for a major incident. They will be notified to either stand by or to mobilize, based on the initial information provided in the first contact from the incident site. Detailed response planning and qualified supervision from HMERT members are critical when this level of response is required.

Heavy Equipment Contractors

Heavy equipment contractors are also available under contract to provide heavy equipment with OSHA-qualified operators for entry into hazardous material control zones.

Environmental Contractors

BNSF maintains a list of qualified environmental contractors that are capable of providing both technical and engineering support. These contractors have 40-hour OSHA certified personnel; however, some are limited to geographical areas due to the required response

equipment, but they can be valuable resources. Once the emergency response is terminated, environmental contractors mobilize at the incident site to begin long-term cleanup, remediation, or site restoration activities.

Specialized Services

Specialized services contractors provide services that go beyond the capabilities of the general hazardous material or environmental contractor, either due to the specific need or the specific hazard. Specialized services contractors provide services such as:

- Tank car "Vent and Burn"
- Tank car "Hot and Cold Taps"
- Environmental modeling
- Explosives
- Tank car patching
- Chemical fire support
- High-hazard transfers
- Natural resources assessments

Emergency Management

Emergency management contractors provide emergency management systems and resources. These systems and resources include:

- Mobile command posts
- Portable command posts
- Communications
- Generators
- Industrial fire fighting equipment
- Bar coding of resources
- Crisis communication center

REGULATORY AND TECHNICAL SUPPORT

When an incident meets the criteria established in 49 CFR 171.15, the SID notifies the National Response Center (1-800-424-0201) and state response centers as required by law. The SID will notify shippers whose shipments may be involved in the incident. The telephone number for this notification will be the number provided on the shipping paper, bill of lading, or waybill. If no emergency response telephone number is available, the SID will notify CHEMTREC and request notification of the customer. For incidents in Canada, the SID will contact CANUTEC (Canadian Transportation Emergency Center) (1-613-996-6666).

MUNICIPAL RESPONDERS

Typically, municipal hazardous materials responders are used at the discretion of the Incident Commander. Their roles vary and may be used as entry, decontamination, or rescue. Additionally, municipalities may have resources such as sand and heavy equipment that can be used for damming or diking.

GOVERNMENT RESOURCES

If governmental resources are needed at the incident, the request for those resources will be made through the Incident Commander.

BNSF CLAIMS DEPARTMENT

The BNSF Claims Department will be notified by the ROC when appropriate. If required, the Claims Department will initiate their *Catastrophic Incident Plan.* This plan is used during incidents, such as large-scale evacuations, to dispatch claims representatives to the location to manage the processing of claims.

BNSF CORPORATE RELATIONS DEPARTMENT

The BNSF Corporate Relations Department receives initial notification from the SID. The ROC and SID supply updated information so that the Corporate Relations team will remain current on the status of the event.

TSS HAZARDOUS MATERIALS COMMANDS

The following TSS commands can be used to gain hazardous materials and emergency response information. For instructions on these commands, see TSS HAZMAT Commands. The following direct commands are currently available:

Command	Description
DTRS	Provides a formatted train list with or without emergency response information
HAZMENU	Provides a menu of HAZMAT TSS Commands
STCC	Provides a listing of HAZMAT commodities by STCC
STCCABBR	Provides HAZMAT description by STCC abbreviation
HAZSTCC	Provides a HAZMAT description by entering the STCC
STCCPSN	Provides HAZMAT proper shipping name from STCC
HAZUNNA	Provides HAZMAT description by UN or NA number
HAZ	Provides emergency response information by car number, STCC, commodity abbreviation or UN/NA Number
HAZCAR	Provides a formatted waybill with additional information by entering the car initial and number
SRHHAZ	Provides a search of a yard for all HAZMAT shipments
WBCOPY	Provides printed waybill
Command	**Description**
CR	Provides car movement record
WAYBCNTC	Provides shipper contact
HAZTRAIN	Provides location of specific hazardous materials in a State or Division
HAZYARD	Provides location of specific hazardous materials in a Yard or Station

SITE SAFETY AND HEALTH PLAN

A BNSF HMR or designee will establish a Site Safety and Health Plan. Although not specifically required under OSHA (29 CFR 1910.120(Q)), the Site Safety and Health Plan will outline and document the hazards and mitigation of hazards at the site.
See Site Safety and Health Plans.

REPORTED CHEMICAL EXPOSURE INCIDENT

Contact the Medical & Environmental Health Department 24-Hour help line:

888-634-1011
or
817-593-4900

Option 1 to report On-the-job injuries or exposures
Option 5 for Materials Safety Data Sheets

TERMINATING THE INCIDENT

Systematic procedures must be followed for terminating a Level II or III hazardous material incident. Incident termination procedures are designed to facilitate any remaining cleanup or restoration actions that are required. The termination procedure will focus on:

- Proper decontamination of personnel and equipment to ensure that the contamination is not carried off-site.
- Proper disposal to ensure that all waste materials and products resulting from the incident or generated by the response activities are properly handled and documented.
- Site restoration and rehabilitation to ensure that reasonable measures are taken to allow for any site damage caused by the incident or response activities. Typically, final clean up is a negotiated position with regulatory agencies.
- Medical surveillance to ensure response personnel, who were possibly exposed during the incident, will be examined as part of the termination phase to document any health effects related to the incident.

POST-INCIDENT ANALYSIS

Following termination of an incident response, the HMR will prepare a *Post-Incident Analysis Report* of the incident. The incident report should include:

- Chronological log of the incident
- Facts about the incident and when they became available
- Names and titles of personnel comprising the teams
- Decisions and orders given: to whom, by whom, and when
- Actions taken: who did what, when, where, and how
- Types of samples and analyses performed, by whom, and the results
- Possible exposures of site personnel and/or the public
- History of injuries or illnesses during, or as a result of, the incident
- Site profile. How did the incident affect the site? How did the incident response activities affect, positively or negatively, the continued site cleanup, remediation, and restoration?

The *Post-Incident Analysis Report* should also contain a critical evaluation of all aspects of the BNSF response plan and lessons learned from the emergency response. When developing the report, the HMR will consider issues such as:

- **Causes** — What caused the emergency? What were the causes of problems during the response effort?
- **Prevention** — Were situations or problems preventable? How?
- **Procedures** — Were inadequate or incorrect orders given or actions taken? Were these the result of insufficient information, poor judgment or bad procedures? Can procedures or training be improved?
- **Communication** — Was communication adequate? Was contact with appropriate resources readily available?
- **Involvement** — Were all responders sufficiently or properly involved in managing the response?

See BNSF HMERT Post-Incident Analysis Report.

RESPONSIBILITIES

The *responsibilities* listed in this section should be followed as closely as possible; however, judgement based on actual circumstance must be the final guide for protecting lives, property, and the environment.

(Note: If the emergency is the result of a release from the Chemical Weapons Depots at Pueblo, CO or Umatilla, WA or a release on the Oregon Trunk Subdivision see Local Reaction Plans under it's own tab)

ALL EMPLOYEES

1. Take all precautions necessary to protect yourself and your coworkers.
2. Notify the dispatcher, Service Interruption Desk, ROC or company official.
3. Until you are released, ensure that the area is secure. Do not allow any unauthorized personnel into the area.

TRAIN CREWS

1. General Requirement

   When an emergency occurs, SAFETY IS OF FIRST IMPORTANCE.

   - Make an emergency call as radio rules require.
   - Look for a fire or vapor cloud.
   - Determine the status of crew members in the area.
   - Warn and keep everyone at a safe distance.

2. When a Fire or Vapor Cloud is Visible

   - Take the shipping papers (including the emergency response information) and move yourself and other crew members uphill and upwind at least one half mile. Stay out of ditches and low areas.
   - Do not smoke or use fusees.
   - Provide the train dispatcher or yardmaster with as much of the following information as is available:
     - Specific location of the emergency (station, mile post location, nearest street or crossing)

- Type of emergency
- Status of crew members
- Cars involved, including each car's initials and numbers and their extent of involvement (for example, leaking, derailed, or on fire)
- Surroundings (e.g., proximity to populated areas, local bodies of water, or nearby drainage ditches or storm sewers; description of terrain; location of access roads; weather conditions)
- Resources necessary to handle the situation (for example, fire, ambulance, and law enforcement agencies)
- Location where a crew member with shipping papers will meet arriving emergency response personnel.

- Once you are in a safe location:

  - Identify yourself and cooperate with the local emergency response personnel as described in Section VIII, item 4.
  - Review your shipping papers and emergency response information.
  - If necessary, move to the farthest distance recommended in:

    - the Evacuation Section of the emergency response information accompanying the shipping papers

      or

    - information from the *Emergency Response Guidebook*.

3. When No Fire or Vapor Cloud is Visible

   - Review the shipping papers for hazardous material shipments.

   - Take the shipping papers (including the emergency response information) and inspect the train to identify the rail cars, trailers, or containers involved, and look for indications of the release of hazardous materials.

   - When you encounter a hazardous material release, unusual smells, or noises during this inspection:

     - Avoid contact with the material and its vapors.
     - Move yourself and other crew members upwind and uphill at least one half mile. Stay out of ditches and low areas.
     - Eliminate any ignition sources (no smoking, no fusees).
     - Warn all bystanders to stay away.

   - After completing the inspection, notify the train dispatcher or yardmaster with as much of this information as is available:

     - Status of crew members
     - Cars involved, including each car's initials and numbers and their extent of involvement (for example, leaking, derailed, or on fire)

- Surroundings (e.g., proximity to populated areas, local bodies of water, or nearby drainage ditches or storm sewers; description of terrain; location of access roads; weather conditions)
- Resources necessary to handle the situation (for example, fire, ambulance, and law enforcement agencies)
- Location where a crew member with shipping papers will meet arriving emergency response personnel.

- Once you are in a safe location:

  - Identify yourself and cooperate with the local emergency response personnel as described in Section VIII, item 4.
  - Review your shipping papers and emergency response information.
  - If necessary, move to the farthest distance recommended in:
    - the Evacuation Section of the emergency response information accompanying the shipping papers

      or
    - information from the *Emergency Response Guidebook*.

4. Cooperating with Local Emergency Responders

   - Share any requested information from the shipping papers with emergency response personnel.

     - Provide an extra copy of the train consist/Train List, when available.

       Note: Retain any waybills and a copy of the train consist/Train List until you can deliver them to the first railroad manager on the scene.
     - Provide a copy of the emergency response information provided with the shipment.
   - Help emergency response personnel identify cars and the commodities involved. Use shipping papers or observations from a safe location to accomplish this task.
   - Give the first railroad manager on the scene an oral description of the incident and indicate any assistance you provided emergency responders.
   - Remain at the scene, at a safe distance, until a railroad manager relieves you.
   - A railroad spokesperson will handle discussing the incident with the media or other non-emergency response personnel.

5. Handling Leaking Hazardous Material Shipments

   Take these actions when there is any sign of leakage:

   - Do **not** allow the hazardous material shipment to continue in transportation until the leak is controlled.

Note: Leaking hazardous material shipments may be moved, with proper railroad authority, only as far as necessary to reduce or eliminate the immediate threat of harm to human health, the environment, or railroad operations. Movement of leaking hazardous material shipments may require government approval.

- When it is necessary to move a leaking hazardous material shipment, use an adequate number of buffer cars between the locomotive and the leaking car, to prevent chemical exposure.

DISPATCHER

1. Obtain the information for the train crew. Utilize the Hazardous Materials Instructions to ensure that the train crew provides all the required information.
2. Stop all trains and BNSF crews from entering the area.
3. Pass all the train crew's information to the Service Interruption Desk.
4. Ensure that the train crew is safe.
5. Help facilitate any requests from the train crew.
6. Keep in contact with the train crew.

SERVICE INTERRUPTION DESK

1. Obtain the required information from: the train crew or dispatcher.
2. Notify the Resource Operations Center.
3. If contacted by anyone other than the train crew, ensure that the dispatcher has been notified.
4. Notify BNSF responders and officers as required in Critical Incident Notification Procedures (see Critical Incident Notification Procedures).
5. Notify the federal, state, and local agencies as required in BNSF's Critical Incident Notification Procedures (see Critical Incident Notification Procedures).
6. Notify shippers as required in Critical Incident Notification Procedures (see Critical Incident Notification Procedures).
7. Utilize the BNSF Geographic Information System (GIS) to obtain necessary response information (see BNSF Geographic Information System).
8. Act as BNSF's communication command until one can be established at the scene.
    - Establish an estimate of arrival times for responders

- Provide updated information for those request it

9. Mobilize resources as required or requested by the HMR or ID.

10. Complete an incident report.

RESOURCE OPERATIONS CENTER

1. Obtain information from the person making the notification

2. Notify the Service Interruption Desk

3. Notify BNSF special agents, claim agents and company officers as required in Critical Incident Notification Procedures (see Critical Incident Notification Procedures)

4. Notify the local civil responders (fire and police) as required in Critical Incident Notification Procedures (see Critical Incident Notification Procedures)

5. Complete an incident report

INCIDENT DIRECTOR

1. Upon reporting to the incident Emergency Command Post, the most senior railroad official will take over as BNSF Incident Director (ID) and can dismiss the train crew and/or junior officer of their ID duties.

2. Review the status of the emergency

3. Interface with civil emergency responders and ensure that they have all the information they need

4. Review civil responders plan of actions and give input where it is needed

5. Coordinate efforts with BNSF operating, mechanical and maintenance of way officers at the scene

6. Ensure that notification has been made to division and system personnel, including hazardous materials responders (HMRs), environmental, safety and rules, resource protection and claims.

7. Jointly with representatives from the HMERT, environmental, and the civil Incident Commander determine a mitigation and clean up plan as outlined in the *Incident Management* section of this plan.

8. Ensure that all government agencies have been notified, as required (see BNSF's Government Notification Procedure for Environmental and Hazardous Materials Releases)

9. Inform the Service Interruption Desk and Corporate Relations of the status of the incident

10. Prepare any required reports

BNSF Hazardous Material Responders

1. The Service Interruption Desk will notify the BNSF HMRs of any incident involving or potentially involving hazardous materials. If the responder is notified by anyone else, or is the first to detect a situation, immediate notification must be made to the appropriate area operation official and the SID.

2. At the scene, the HMRs will serve as advisors and resources to the BNSF Incident Director and the civil Incident Commander.

3. If safe to do so, the HMR will:

   - Determine the location and the status (health, injuries, medical) of all employees or involved persons and if emergency support services are required
   - Determine a safe perimeter
   - Assess the degree of contamination to the environment
   - Determine if assistance or additional resources are required, and if so, advise the ID, IC and/or SID so the resources (medical, shipper, contractor, etc.) may be obtained

4. Evaluate the situation prior to entering the area

   - Identify the commodities involved
   - Determine what dangers the materials, containers, and possible conditions present
   - Consult the shipper and the BNSF monitoring and personal protective equipment guide to select the correct protective clothing, respiratory protection, and monitoring equipment
   - Ensure that there is proper back-up and use the buddy system
   - By assessing the scene remotely and by entry, determine the extent of damage to hazardous materials containers
   - If possible, monitor the atmosphere for contamination (flammable, toxic, etc.) and oxygen levels
   - Monitor environmental contamination for leaks or spills

5. Follow the DECIDE process and the procedures outlined in the Incident Management section of this plan.

All the responder's actions must be consistent with the capabilities of the individual HMR and the protective equipment available.

ENVIRONMENTAL RESPONDER

1. Contact and mobilize remediation contractors, when needed
2. Coordinate all site remediation activities with BNSF's Incident Director, civil Incident Commander and BNSF HMRs
3. Ensure that local, state, and federal regulatory agencies have been notified and are aware of the environmental and remediation activities
4. Manage all site environmental sampling and monitoring activities

ASSISTANT DIRECTOR, HAZARDOUS MATERIALS

1. Ensure that BNSF's HMERT is properly trained and equipped and is well distributed throughout the system
2. Coordinate all hazardous materials activities with BNSF's Incident Director, civil Incident Commander and BNSF HMRs.
3. Respond to the incident scene, when needed
4. Coordinate and mobilize the BNSF Strike Team, when needed
5. Contact and mobilize hazmat contractors, when needed

BNSF POLICE AND/OR SPECIAL AGENTS

Provide and coordinate site security with local law enforcement agencies

LOAD AND RIDE SOLUTIONS (LARS)

1. Active status as a HMRs
2. Procure empty railcars for transfer operations
3. Contact and mobilize hazmat contractors, when needed
4. Provide lading damage and loss reports
5. Coordinate all intermodal and non-hazmat lading transfers

CORPORATE RELATIONS

1. Schedule, coordinate, and manage periodic press releases and/or interviews
2. Maintain a log of key events and press inquires
3. Provided a liaison between the BNSF on-site personnel and the media
4. Provide and manage external and internal communications of the incident
5. Interface with HMRs, environmental, and industrial hygiene personnel to ensure that press releases are technically correct and scientifically sound

SAFETY AND RULES

1. Provide and coordinate site safety for BNSF personnel and our contractors
2. Maintain the LPP

INDUSTRIAL HYGIENE

1. When requested, coordinate site environmental monitoring
2. Provide professional consultation to the civil Incident Commander, BNSF Incident Director, HMR, and Safety and Rules Manager

OPERATIONS

1. Manage and coordinate train movements or the staging of train traffic
2. Attend safety and status briefings
3. Be available to the BNSF Incident Director

MECHANICAL

1. Coordinate and manage the movement and/or uprighting of derailed cars
2. Attend safety and status briefings
3. Be available to the BNSF Incident Director

ENGINEERING

1. Coordinate and manage the assembly of equipment and operators to build dams, dikes and to support incident responses as required
2. Rebuild track structure when the hazard has been abated
3. Attend safety and status briefings
4. Be available to the BNSF Incident Director

CLAIMS

1. Initiate the Claim's Department Catastrophic Incident Plan
2. Attend safety and status briefings
3. Be available to the BNSF Incident Director

MARKETING

Follow-up with shippers and consignees during and after the incident

SECURITY

The purpose of this section is to provide information on the security plans Burlington Northern Santa Fe has in place to protect hazardous materials shipments, as required by the federal regulations at 49 CFR, Part 172.800-802.

The railway industry, in collaboration with the Association of American Railroads, American Chemistry Council, The Fertilizer Institute, and others, has formed a Railroad Security Task Force to develop and maintain a Terrorism Risk Analysis and Security Management Plan. Components of this plan identify risks associated with the transportation of hazardous materials and specific countermeasures that are commensurate with the railway's threat level. For security reasons, specific countermeasures remain on a strict need-to-know basis and are provided to the responsible individuals as a need develops.

THREAT LEVELS

The threat level is determined by using a model to establish the level of risk. Risk assessment includes the type of asset, vulnerability and the threat, which is driven by intelligence information. It accounts for risk to the population, national economy and national security. There are four established threat levels:

- Level 1: New/normal day-to-day operations
- Level 2: Heightened security awareness
- Level 3: Credible threat of an attack on U.S. or the railroad industry (subject to continuous reevaluation)
- Level 4: Confirmed threat of attack against the railroad industry or an actual attack in the U.S. (up to 72 hours and reevaluated)

PERSONNEL SECURITY

BNSF currently completes appropriate background investigations on all new-hire employees while observing privacy laws. Recent initiatives will require background investigations for BNSF contractors regularly working on BNSF property.

UNAUTHORIZED ACCESS TO HAZMAT AND EN ROUTE SECURITY

Hazardous materials shipped on BNSF receive special identification on waybills, track and train list inventories, and special handling (including in-train placement checks and automatically updated train list entries). Emergency response information is provided to train crews and operations managers.

SHIPMENT SAFEGUARD

Additionally, BNSF has taken the following steps to safeguard shipments while in-transit:

- **Resource Protection Team**
  BNSF's Resource Protection Solutions Team provides a number of security-related services, including Load and Ride Solutions, Police Solutions and Protection Solutions. The Resource Protection Solutions Team also operates the 24-hour Resource Operations Call Center (ROCC) in Fort Worth, Texas. This desk is responsible for receiving urgent and emergency communications from the public, public safety agencies, or railway personnel and also for coordinating an appropriate organizational response.

- **BNSF Railway Police**
  Railway police patrol and conduct investigations on railway properties. In many instances, the railway police use marked police units and have access to a member of the BNSF Police K-9 team.

- **Trespasser Abatement Program**
  BNSF's Trespasser Abatement Program includes a four-phase action plan that coordinates the efforts of local communities, media, BNSF Operations and the railway police team to identify and remove any unauthorized persons from railway property.

- **Train Inspection Program**
  Railway police, contract security, and other inspectors participate in a train inspection program to ensure seal integrity and assess overall condition of in-transit shipments.

- **Trend Analysis**
  BNSF continuously maps and analyzes trends involving loss, damage, trespassing and threats, as well as utilizing a Strategic Asset Tracking Program that identifies specific at-risk shipments.

- **Shipment Tracking**
  BNSF's mainframe Transportation Support System (TSS) tracks shipments as they move through the BNSF transportation cycle.

- **Railway Alert Network**
  BNSF is a member of the Railway Alert Network, a cooperative effort to communicate intelligence information among critical elements of America's railway system.

- **2003 Security Brochure**
  Brochures were sent to every employee addressing their responsibilities in BNSF Security, see Appendix T.

- **2003 Safety Briefings on Work Place Security for Mechanical, MOW, Ty&E (Yard and Road) and Office**
  BNSF utilizes safety briefings on security topics to reinforce employee responsibilities in BNSF Security.

APPENDIX

A. Local Preparedness Plans

B. Local Reaction Plans

1. Alkali Creek Diesel Storage Tank – 6 miles north of Billings, MT
2. Deschutes River GRP – Oregon Trunk Subdivision
3. Pueblo Chemical Agent Storage and Disposal Fa cility - Emergency Reaction Plan – Pueblo, CO
4. Umatilla Chemical Agent Storage and Disposal Facility - Emergency Reaction Plan – Umatilla, WA
5. Hurricane Preparedness Plans

C. Critical Incident Notification Procedures

D. Civil Agency Hazmat Notification

E. Government Notification Procedure for Environmental and Hazardous Materials Releases

F. Customer Notification Protocol

G. BNSF Media Contacts (Corporate Relations)

H. BNSF Hazardous Materials Responder Notification List

I. BNSF Hazardous Material Program

J. BNSF HMR Equipment List

K. TSS HAZMAT Commands

L. BNSF Site Safety and Health Plans

M. Tank Car Damage Assessment

N. BNSF HMERT Post-Incident Analysis Report

O. DOT 5800.1 – Hazmat Release Form